

# Notice of Allowability

Application No.

10/721,853

Examiner

Jennifer C. McNeil

Applicant(s)

DAROLIA ET AL.

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to interview summary of July 15, 2005.
2. ☒ The allowed claim(s) is/are 1,6-13,17,19-25,29,30 and 32-34.
3. ☒ The drawings filed on 25 November 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**JENNIFER MCNEIL**  
**PRIMARY EXAMINER**

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Eric Guttag on July 15, 2005.

The application has been amended as follows:

**IN THE CLAIMS** (claims as presented in after-final amendment June 16, 2005):

Claim 1, line 11, delete "zirconia, hafnia, ceria, lanthana".

Claim 13, line 14, delete "zirconia, hafnia, ceria, lanthana".

Cancel claim 15.

Cancel claim 36.

The following is an examiner's statement of reasons for allowance: The prior art of record does not teach or render obvious a bond coat for adhering a thermal barrier coating to an underlying metal substrate, the bond coat having an upper portion comprising a bond coating material selected from the group consisting of aluminide diffusion coating material, overlay alloy materials other than beta-phase NiAl intermetallic overlay coating material, and a dispersion within at least the upper portion of the bond coat of particles having a particle size of about 2 microns or less and comprising a substantially insoluble bond coat strengthening compound, the amount of dispersed particles within the at least upper portion of the bond coat being sufficient to impart increased strengthening to the bond coat, wherein the bond coat strengthening compound is selected from the group consisting of ZrC, HfC, TaC, AlN, ZrN, HfN, and mixtures thereof. The closest prior art of record to Wustman '845, Brindley '454, and Rickerby '015,

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teach bond coatings with particles therein, but do not teach all the above limitations in combination. For instance, Wustman does not teach a particle comprised of one of the above compositions. Brindley also does not teach a particle of the above composition. Neither reference specify a particle of less than about 2 microns. Rickerby teaches a TaC or HfC particles, but gives no indication of the particle size, and no motivation is provided in any of the references to use fine particles with the specific size of less than about 2 microns. Therefore, the combination of the above limitations is not considered to be disclosed or obvious over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer C. McNeil whose telephone number is 571-272-1540. The examiner can normally be reached on 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**JENNIFER MCNEIL**  
**PRIMARY EXAMINER**

Jennifer McNeil

July 25, 2005